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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,716	01/26/2006	Richard Sharp	MSQ01-005-US	9797

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EVAN LAW GROUP LLC
600 WEST JACKSON BLVD., SUITE 625
CHICAGO, IL 60661

EXAMINER

GANGLE, BRIAN J

ART UNIT	PAPER NUMBER
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1645

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/541,716	Applicant(s) SHARP ET AL.	
	Examiner BRIAN J. GANGLE	Art Unit 1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-87 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 41-87 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 41-42, 46, 49-52, and 54-56, drawn to compositions for treating a bacterial biofilm in the lung of a cystic fibrosis patient, comprising a first bacteriophage that is capable of infecting a bacterium within said biofilm, a first polysaccharide lyase enzyme that is capable of degrading a polysaccharide within said biofilm, and an antimicrobial agent.

Group II, claim(s) 43 and 46, drawn to compositions for treating a bacterial biofilm in the lung of a cystic fibrosis patient, comprising a first bacteriophage that is capable of infecting a bacterium within said biofilm, a first polysaccharide lyase enzyme that is capable of degrading a polysaccharide within said biofilm, an antimicrobial agent, and a DNase.

Group III, claim(s) 44-46 and 55, drawn to compositions for treating a bacterial biofilm in the lung of a cystic fibrosis patient, comprising a first bacteriophage that is capable of infecting a bacterium within said biofilm, a first polysaccharide lyase enzyme that is capable of degrading a polysaccharide within said biofilm, an antimicrobial agent, and a second polysaccharide lyase.

Group IV, claim(s) 47 and 53, drawn to compositions for treating a bacterial biofilm in the lung of a cystic fibrosis patient, comprising a first bacteriophage that is capable of infecting a bacterium within said biofilm, a first polysaccharide lyase enzyme that is capable of degrading a polysaccharide within said biofilm, an antimicrobial agent, and a second bacteriophage.

Group V, claim(s) 48, drawn to compositions for treating a bacterial biofilm in the lung of a cystic fibrosis patient, comprising a first bacteriophage that is capable of infecting a bacterium within said biofilm, a first polysaccharide lyase enzyme that is capable of degrading a polysaccharide within said biofilm, and two antimicrobial agents.

Group VI, claim(s) 57, drawn to a GH bacteriophage selected from the group consisting of GH4 (ECACC Accession No. 02121203), GH6 (ECACC Accession No. 02121202), GH13 (ECACC Accession No. 02121201), and GH14 (ECACC Accession No. 02121204).

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Group VII, claim(s) 58-59, 62-63, 66-69, 71-78, and 81, drawn to methods of treating a biofilm infection in a cystic fibrosis patient, comprising administering a first bacteriophage that is capable of infecting a bacterium within said biofilm, a first polysaccharide lyase enzyme that is capable of degrading a polysaccharide within said biofilm, and an antimicrobial agent.

Group VIII, claim(s) 60 and 63, drawn to methods of treating a biofilm infection in a cystic fibrosis patient, comprising administering a first bacteriophage that is capable of infecting a bacterium within said biofilm, a first polysaccharide lyase enzyme that is capable of degrading a polysaccharide within said biofilm, an antimicrobial agent, and a DNase.

Group IX, claim(s) 61, 63, 72, and 79, drawn to methods of treating a biofilm infection in a cystic fibrosis patient, comprising administering a first bacteriophage that is capable of infecting a bacterium within said biofilm, a first polysaccharide lyase enzyme that is capable of degrading a polysaccharide within said biofilm, an antimicrobial agent, and a second polysaccharide lyase.

Group X, claim(s) 64, 70, and 80, drawn to methods of treating a biofilm infection in a cystic fibrosis patient, comprising administering a first bacteriophage that is capable of infecting a bacterium within said biofilm, a first polysaccharide lyase enzyme that is capable of degrading a polysaccharide within said biofilm, an antimicrobial agent, and a second bacteriophage.

Group XI, claim(s) 65, drawn to methods of treating a biofilm infection in a cystic fibrosis patient, comprising administering a first bacteriophage that is capable of infecting a bacterium within said biofilm, a first polysaccharide lyase enzyme that is capable of degrading a polysaccharide within said biofilm, and two antimicrobial agents.

Group XII, claim(s) 82-87, drawn to methods of making a modified bacteriophage capable of degrading a biofilm, comprising (a) selecting at least one gene encoding a polysaccharide lyase enzyme that degrades a polysaccharide within the biofilm, (b) selecting a bacteriophage that is capable of infecting a bacterial species residing in the biofilm, and (c) introducing at least one of the genes selected in step (a) into the bacteriophage nucleic acid.

The inventions listed as Groups I-XII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The technical feature that links Groups I-XII appears to be a GH bacteriophage.

However, Lee *et al.* (J. Bacteriol., 92:1821-1827, 1966) disclose bacteriophage gh-1, which infects *Pseudomonas putida*.

Therefore, the technical feature linking the inventions of Groups I-XII does not constitute a special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over the art.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained.

Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double

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patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN J. GANGLE whose telephone number is (571)272-1181. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shanon Foley can be reached on (571) 272-0898. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian J Gangle/
Examiner, Art Unit 1645

/Shanon A. Foley/
Supervisory Patent Examiner, Art Unit 1645